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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/724,685

DATE: 10/24/2001
TIME: 12:35:47

Input Set : A:\-85-6-1.app
Output Set: N:\CRF3\10242001\I724685.raw

SEQUENCE LISTING

ENTERED

4 (1) GENERAL INFORMATION:

6 (i) APPLICANT: Reed, Steven G.
7 Skeiky, Yasir
8 Dillon, Davin C.
9 Campos-Neto, Antonio

11 (ii) TITLE OF INVENTION: Compounds and Methods for
12 Immunotherapy and Diagnosis of Tuberculosis

14 (iii) NUMBER OF SEQUENCES: 155

16 (iv) CORRESPONDENCE ADDRESS:

17 (A) ADDRESSEE: Townsend and Townsend and Crew LLP
18 (B) STREET: Two Embarcadero Center, Eighth Floor
19 (C) CITY: San Francisco
20 (D) STATE: California
21 (E) COUNTRY: USA
22 (F) ZIP: 94111-3834

24 (v) COMPUTER READABLE FORM:

25 (A) MEDIUM TYPE: Floppy disk
26 (B) COMPUTER: IBM PC compatible
27 (C) OPERATING SYSTEM: PC-DOS/MS-DOS
28 (D) SOFTWARE: PatentIn Release #1.0, Version #1.30

30 (vi) CURRENT APPLICATION DATA:

31 (A) APPLICATION NUMBER: US/09/724,685 *gft*

32 (B) FILING DATE: 28-Nov-2000

33 (C) CLASSIFICATION:

63 (vii) PRIOR APPLICATION DATA:

36 (A) APPLICATION NUMBER: US 08/523,436

37 (B) FILING DATE: 01-SEP-1995

40 (A) APPLICATION NUMBER: US 08/533,634

41 (B) FILING DATE: 22-SEP-1995

44 (A) APPLICATION NUMBER: US 08/620,874

45 (B) FILING DATE: 22-MAR-1996

48 (A) APPLICATION NUMBER: US 08/659,683

49 (B) FILING DATE: 05-JUN-1996

52 (A) APPLICATION NUMBER: US 08/680,574

53 (B) FILING DATE: 12-JUL-1996

56 (A) APPLICATION NUMBER: WO PCT/US96/14674

57 (B) FILING DATE: 30-AUG-1996

60 (A) APPLICATION NUMBER: US 08/730,511

61 (B) FILING DATE: 11-OCT-1996

64 (A) APPLICATION NUMBER: US 08/818,112

65 (B) FILING DATE: 13-MAR-1997

67 (viii) ATTORNEY/AGENT INFORMATION:

68 (A) NAME: Bastian, Kevin L.

69 (B) REGISTRATION NUMBER: 34,774

70 (C) REFERENCE/DOCKET NUMBER: 014058-008561US

72 (ix) TELECOMMUNICATION INFORMATION:

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Input Set : A:\-85-6-1.app
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73 (A) TELEPHONE: (415) 576-0200
74 (B) TELEFAX: (415) 576-0300
77 (2) INFORMATION FOR SEQ ID NO: 1:
79 (i) SEQUENCE CHARACTERISTICS:
80 (A) LENGTH: 766 base pairs
81 (B) TYPE: nucleic acid
82 (C) STRANDEDNESS: single
83 (D) TOPOLOGY: linear
85 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
87 CGAGGCACCG GTAGTTGAA CCAAACGCAC AATCGACGGG CAAACGAACG GAAGAACACA 60
89 ACCATGAAGA TGGTGAATC GATGCCGCA GGTCTGACCG CCGCGGCTGC AATCGCGCC 120
91 GCTGCGGCCG GTGTGACTTC GATCATGGCT GGCGGCCCGG TCGTATACCA GATGCAGCCG 180
93 GTCGTCTTCG GCGGCCACT GCCGTTGGAC CCGGCATCCG CCCCTGACGT CCCGACCGCC 240
95 GCCCAGTTGA CCAGCCTGCT CAACAGCCTC GCCGATCCCA ACGTGTCGTT TCGAACAAAG 300
97 GGCAGTCTGG TCGAGGGCGG CATCGGGGGC ACCGAGGCGC GCATCGCCGA CCACAAAGCTG 360
99 AAGAAGGCCG CCGAGCACGG GGATCTGCCG CTGTCGTTCA GCGTGACGAA CATCCAGCCG 420
101 GCGGCCGCCG GTTCGGCCAC CGCCGACGTT TCCGTCTCGG GTCCGAAGCT CTCGTCGCCG 480
103 GTCACGCAGA ACGTCACGTT CGTGAATCAA GGCAGCTGGA TGCTGTCACG CGCATCGGCCG 540
105 ATGGAGTTGC TGCAGGCCGC AGGGNAACTG ATTGGCGGGC CGGNTTCAGC CCCGTTGTC 600
107 GCTACGCCGC CCGCCTGGTG ACGCGTCCAT GTCGAACACT CGCGCGTGTGTA GCACGGTGCG 660
109 GTNTGCGCAG GGNCGCACGC ACCGCCCCGT GCAAGCCGTC CTCGAGATAG GTGGTGNCTC 720
111 GNCACCAAGNG ANCACCCCCN NNTCGNCNT TCTCGNTGNT GNATGA 766
114 (2) INFORMATION FOR SEQ ID NO: 2:
116 (i) SEQUENCE CHARACTERISTICS:
117 (A) LENGTH: 752 base pairs
118 (B) TYPE: nucleic acid
119 (C) STRANDEDNESS: single
120 (D) TOPOLOGY: linear
122 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
124 ATGCATCACC ATCACCATCA CGATGAAGTC ACGGTAGAGA CGACCTCCGT CTTCCGCGCA 60
126 GACTTCCTCA GCGAGCTGGA CGCTCCTGGC CAAGCGGGTA CGGAGAGCGC GGTCTCCGGG 120
128 GTGGAAGGGC TCCCGCCGGG CTCGGCGTTG CTGGTAGTCA AACGAGGGCC CAACGCCGGG 180
130 TCCCGGTTCC TACTCGACCA AGCCATCACG TCGGCTGGTC GGCATCCCGA CAGCGACATA 240
132 TTTCTCGACG ACGTGACCGT GAGCCGTCCG CATGCTGAAT TCCGGTTGGA AAACAACGAA 300
134 TTCAATGTCG TCGATGTCGG GAGTCTCAAC GGCACCTACG TCAACCGCGA GCCCGTGGAT 360
136 TCGGCGGTGCG TGGCGAACGG CGACGAGGTC CAGATCGGCA AGCTCCGGTT GGTGTTCTTG 420
138 ACCGGACCCA AGCAAGGCGA GGATGACGGG AGTACCGGGG GCCCGTGAGC GCACCCGATA 480
140 GCCCCGCGCT GGCGGGATG TCGATCGGGG CGGTCCCTCCG ACCTGCTACG ACCGGATTT 540
142 CCCTGATGTC CACCATCTCC AAGATTCGAT TCTTGGGAGG CTTGAGGGTC NGGGTGACCC 600
144 CCCCGGGGC CTCATTNGG GGTNTCGGCN GGTTTCACCC CNTACCNACT GCCNCCCGGN 660
146 TTGCNAATTG NTTCTCNC GCCCCNAAAG GGACCNNTAN CTTGCCGCTN GAAANGTNA 720
148 TCCNGGGCCC NTCCTNGAAN CCCCNCCCC CT 752
151 (2) INFORMATION FOR SEQ ID NO: 3:
153 (i) SEQUENCE CHARACTERISTICS:
154 (A) LENGTH: 813 base pairs
155 (B) TYPE: nucleic acid
156 (C) STRANDEDNESS: single
157 (D) TOPOLOGY: linear
159 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:

RAW SEQUENCE LISTING
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Input Set : A:\-85-6-1.app
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161	CATATGCATC ACCATCACCA TCACACTTCT AACCGCCCAG CGCGTCGGGG GCGTCGAGCA	60
163	CCACCGGACA CGGGGCCGA TCGATCTGCT AGCTTGAGTC TGGTCAGGCA TCGTCGTCAG	120
165	CAGCGCGATG CCCTATGTTT GTCGTCGACT CAGATATCGC GGCAATCCAA TCTCCCGCCT	180
167	GCGGCCGGCG GTGCTGAAA CTACTCCCGG AGGAATTTCG ACGTGCGCAT CAAGATCTTC	240
169	ATGCTGGTCA CGGCTGTCGT TTTGCTCTGT TGTTGGGTG TGGCCACGGC CGGCCCAAG	300
171	ACCTACTGCG AGGAGTTGAA AGGCACCGAT ACCGCCAGG CGTGCAGAT TCAAATGTCC	360
173	GACCCGGCCT ACAACATCAA CATCAGCCGT CCCAGTTACT ACCCCGACCA GAAGTCGCTG	420
175	GAAAATTACA TCGCCCGAC GCGCGACAAG TTCCCTCAGCG CGGCCACATC GTCCACTCCA	480
177	CGCGAAGCCC CCTACGAATT GAATATCACC TCGGCCACAT ACCAGTCCGC GATACCGCCG	540
179	CGTGGTACGC AGGCCGTGGT GCTCAMGGTC TACACAAACG CGGGCGGCAC GCACCCAACG	600
181	ACCACGTACA AGGCCTTCGA TTGGGACCAAG GCCTATCGCA AGCCAATCAC CTATGACACG	660
183	CTGTGGCAGG CTGACACCGA TCCGCTGCCA GTCGTCTTCC CCATTGTTGC AAGGTGAAC	720
185	GAGCAACGCA GACCAGGACA ACWGGTATCG ATAGCCGCGN AATGCCGGCT TGGAACCCNG	780
187	TGAAATTATC ACAACTTCGC AGTCACNAAA NAA	813

190 (2) INFORMATION FOR SEQ ID NO: 4:

192 (i) SEQUENCE CHARACTERISTICS:
193 (A) LENGTH: 447 base pairs
194 (B) TYPE: nucleic acid
195 (C) STRANDEDNESS: single
196 (D) TOPOLOGY: linear

198 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:

200	CGGTATGAAC ACGGCCGCGT CCGATAACTT CCAGCTGTCC CAGGGTGGGC AGGGATTTCGC	60
202	CATTCCGATC GGGCAGGCGA TGGCGATCGC GGGCAGATC CGATCGGGTG GGGGTCAACC	120
204	CACCGTTCAT ATCGGGCCTA CCGCCTTCCT CGGCTTGGGT GTTGTGACA ACAACGGCAA	180
206	CGGCGCACGA GTCCAACGCG TGGTCGGGAG CGCTCCGGCG GCAAGTCTCG GCATCTCCAC	240
208	CGGCGACGTG ATCACCGCG TCGACGGCGC TCCGATCAAC TCGGCCACCG CGATGGCGGA	300
210	CGCGCTTAAC GGGCATCATC CCGGTGACGT CATCTCGGTG AACTGGCAAA CCAAGTCGGG	360
212	CGGCACGCGT ACAGGGAACG TGACATTGGC CGAGGGACCC CGGGCTGAT TTCGTCGYGG	420
214	ATACCACCCG CGGCCGGGCC AATTGGA	447

217 (2) INFORMATION FOR SEQ ID NO: 5:

219 (i) SEQUENCE CHARACTERISTICS:
220 (A) LENGTH: 604 base pairs
221 (B) TYPE: nucleic acid
222 (C) STRANDEDNESS: single
223 (D) TOPOLOGY: linear

225 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:

227	GTCCTCACTGC GGTGCCGAG TATGTCGCC AGCAAATGTC TGGCAGCCGC CCAACGGAAT	60
229	CGGGTGATCC GACGTCGCGAG GTTGTGAAAC CCGCCGCCGC GGAAGTATCG GTCCATGCCT	120
231	AGCCCAGCGA CGGCGAGCGC CGGAATGGCG CGAGTGAGGA GGCAGGGCAAT TTGGCGGGGC	180
233	CGGCGACGG NGAGCGCCGG AATGGCGCGA GTGAGGAGGT GGNCAGTCAT GCCCAGNGTG	240
235	ATCCAATCAA CCTGNATTG GNCTGNGGN CCATTGACA ATCGAGGTAG TGAGCGCAA	300
237	TGAATGATGG AAAACGGGNG GNGACGTCCG NTGTTCTGGT GGTGNTAGGT GNCTGNCTGG	360
239	NGTNGNGNT ATCAGGATGT TCTTCGCGA AANCTGATGN CGAGGAACAG GGTGTNCCCG	420
241	NNANNCCNAN GGNGTCCNAN CCCNNNNNTCC TCGNCGANAT CANANAGNCG NTTGATGNGA	480
243	NAAAAGGGTG GANCAGNNNN AANTNGNGGN CCNAANAANC NNNNANGNNG NNAGNTNGNT	540
245	NNNTNTNNNC ANNNNNNNNTG NNGNNGNNCN NNNCAANCNN NTNNNNNGNAA NNGGNTTNTT	600
247	NAAT	604

250 (2) INFORMATION FOR SEQ ID NO: 6:

252 (i) SEQUENCE CHARACTERISTICS:

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253 (A) LENGTH: 633 base pairs
254 (B) TYPE: nucleic acid
255 (C) STRANDEDNESS: single
256 (D) TOPOLOGY: linear
258 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
260 TTGCANGTCTG AACCACCTCA CAAAGGGAA CAAAGCTNG AGCTCCACCG CGGTGGCGGC 60
262 CGCTCTAGAA CTAGTGKATM YYCKGGCTG CAGSAATYCG GYACGAGCAT TAGGACAGTC 120
264 TAACGGTCCT GTTACGGTGA TCGAATGACC GACGACATCC TGCTGATCGA CACCGACGAA 180
266 CGGGTGCAGA CCCTCACCC CAACCGGCCG CAGTCCCGYA ACGCGCTCTC GGCGCGCTA 240
268 CGGGATCGGT TTTTCGCGGY GTTGGYCGAC GCCGAGGYCG ACGACGACAT CGACGTCGTC 300
270 ATCCTCACCG GYGCCGATCC GGTGTTCTGC GCCGACTGG ACCTCAAGGT AGCTGGCCGG 360
272 GCAGACCGCG CTGCCGGACA TCTCACCGCG GTGGCGGCC ATGACCAAGC CGGTGATCGG 420
274 CGCGATCAAC GGCGCCGCGG TCACCGGGCG GCTCGAACTG GCGCTGTACT GCGACATCCT 480
276 GATCGCCTCC GAGCACGCCG GCTTCGNCGA CACCCACGCC CGGGTGGGGC TGCTGCCAC 540
278 CTGGGGACTC AGTGTGTGCT TGCCGCAAAA GGTGGCATC GGNCTGGGC GGTGGATGAG 600
280 CCTGACCGGG GACTACCTGT CCGTGACCGA CGC 633
283 (2) INFORMATION FOR SEQ ID NO: 7:
285 (i) SEQUENCE CHARACTERISTICS:
286 (A) LENGTH: 1362 base pairs
287 (B) TYPE: nucleic acid
288 (C) STRANDEDNESS: single
289 (D) TOPOLOGY: linear
291 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
293 CGACGACGAC GGCGCCGGAG AGCGGGCGCG AACGGCGATC GACGCCGGCC TGGCCAGAGT 60
295 CGGCACCACC CAGGAGGGAG TCGAATCATG AAATTGTCA ACCATATTGA GCCCGTCGCG 120
297 CCCCGCCGAG CGCGCCGCGC GTCTGCCGAG GTCTATGCCG AGGCCCGCCG CGAGTTCGGC 180
299 CGGCTGCCCG AGCCGCTCGC CATGCTGTCC CCGGACGAGG GACTGCTCAC CGCCGGCTGG 240
301 GCGACGTTGC GCGAGACACT GCTGGTGGC CAGGTGCCGC GTGGCCGCAA GGAAGCCGTC 300
303 GCCGCCGCCG TCGCGGCCAG CCTGCGCTGC CCCTGGTGC TCGACGCACA CACCACTATG 360
305 CTGTACGCGG CAGGCCAAAC CGACACCGCC CGGGCGATCT TGGCCGGCAC AGCACCTGCC 420
307 GCCGGTGACC CGAACCGGCC GTATGTGGCG TGGGGCGCAG GAACCGGGAC ACCGGCGGGA 480
309 CGGCCGGCAC CGTTCCGCC GGATGTCGCC GCCGAATACC TGGGCACCGC GGTGCAATTG 540
311 CACTTCATCG CACGCTGGT CCTGGTGC TCTGGACGAA CCTTCCTGCC GGGGGGCCCG 600
313 CGCGCCCAAC AGCTCATGCG CCGCGCCGGT GGACTGGTGT TCGCCCGCAA GGTGCGCGCG 660
315 GAGCATCGGC CGGGCCGCTC CACCCGCCGG CTCGAGCCGC GAACGCTGCC CGACGATCTG 720
317 GCATGGGCAA CACCGTCCGA GCCCATAGCA ACCCGCTTCG CCGCGCTCAG CCACCACTG 780
319 GACACCGCGC CGCACCTGCC GCCACCGACT CGTCAGGTGG TCAGGGGGT CGTGGGTGCG 840
321 TGGCACGGCG AGCCAATGCC GATGAGCAGT CGCTGGACGA ACGAGCACAC CGCCGAGCTG 900
323 CCCGCCGACC TGCACCGGCC CACCCGTCTT GCCCTGCTGA CGGGCCTGGC CCCGCATCAG 960
325 GTGACCGACG ACGACGTCGC CGCGGCCCGA TCCCTGCTCG ACACCGATGC GGCCTGGTT 1020
327 GGCGCCCTGG CCTGGGCCGC CTTACCGCC CGCGGCCGCA TCGGCACCTG GATGGCGCC 1080
329 GCCGCCGAGG GCCAGGTGTC CGGGCAAAC CCGACTGGGT GAGTGTGCGC GCCCTGTCGG 1140
331 TAGGGTGTCA TCGCTGGCCC GAGGGATCTC CGGGCGCGA ACGGAGGTGG CGACACAGGT 1200
333 GGAAGCTGCG CCCACTGGCT TGCGCCCCAA CGCCGCTCGT GGCCTTCGGT TGGCCGACT 1260
335 GGCGATCAC GTCGGCGCCG CCCCTGGCC GAAGGTCCAG CTCAACGTGC CGTCACCGAA 1320
337 GGACCGGACG GTCACCGGGG GTCACCTGCG CGGCCAAGG AA 1362
340 (2) INFORMATION FOR SEQ ID NO: 8:
342 (i) SEQUENCE CHARACTERISTICS:
343 (A) LENGTH: 1458 base pairs

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344 (B) TYPE: nucleic acid
345 (C) STRANDEDNESS: single
346 (D) TOPOLOGY: linear
348 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
350 GCGACGACCC CGATATGCCG GGCACCGTAG CGAAAGCCGT CGCCGACGCA CTCGGGCGCG 60
352 GTATCGCTCC CGTTGAGGAC ATTCAAGGACT GCGTGGAGGC CCGGCTGGGG GAAGCCGGTC 120
354 TGGATGACGT GGCCCGTGT TACATCATCT ACCGGCAGCG GCGCGCCGAG CTGCGGACGG 180
356 CTAAGGCCTT GCTCGCGTGT CGGGACGAGT TAAAGCTGAG CTTGGCGGCC GTGACGGTAC 240
358 TGCACGAGCG CTATCTGCTG CACGACGAGC AGGGCCGGCC GGCGAGTCG ACCGGCGAGC 300
360 TGATGGACCG ATCGGCGCGC TGTGTCGCGG CGGCCGAGGA CCAGTATGAG CCAGGCTCGT 360
362 CGAGGGCGGTG GGCGAGCGG TTGCGCACGC TATTACGAA CCTGGAATT CCTGCCGAATT 420
364 CGCCCACGTT GATGAACCT GGCACCGACC TGGGACTGCT CGCCGGCTGT TTTGTTCTGC 480
366 CGATTGAGGA TTCGCTGCAA TCGATCTTG CGACGCTGGG ACAGGCGCC GAGCTGCAGC 540
368 GGGCTGGAGG CGGCACCCGGA TATGCGTTCA GCCACCTGCG ACCCGCCGGG GATCGGGTGG 600
370 CCTCCACGGG CGGCACGGCC AGCGGACCGG TGTGTTCT ACAGGCTGTAT GACAGTGGCG 660
372 CGGGTGTGGT CTCCATGGGC GGTGCGCCGGC GTGGCGCTG TATGGCTGT CTTGATGTGT 720
374 CGCACCCGGA TATCTGTGAT TTCGTCACCG CCAAGGCCGA ATCCCCCAGC GAGCTCCCGC 780
376 ATTTCAACCT ATCGGTTGGT GTGACCGACG CGTTCCTGCG GGCGTCGAA CGCAACGGCC 840
378 TACACCGGCT GGTCAATCCG CGAACCGGCA AGATCGTCGC GCGGATGCC GCGCCGAGC 900
380 TGTCGACGC CATCTGCAA GCGCGCAGC CCGGTGGCGA TCCCAGGCTG GTGTTCTCG 960
382 ACACGATCAA TAGGGCAAAAC CCGGTGCCGG GGAGAGGCCG CATCGAGCG ACCAACCCGT 1020
384 CGGGGGAGGT CCCACTGCTG CCTTACGAGT CATGTAATCT CGGCTCGATC AACCTCGCCC 1080
386 GGATGCTCGC CGACGGTCGC GTGACTGGG ACCGGCTCGA GGAGGTGCC GGTGTCGG 1140
388 TGCGGTTCCCT TGATGACGTC ATCGATGTCA GCCGCTACCC CTTCCCCGAA CTGGGTGAGG 1200
390 CGGCCCGCGC CACCCGCAAG ATCGGGCTGG GAGTCATGGG TTTGGCGAA CTGCTTGCGC 1260
392 CACTGGGTAT TCCGTACGAC AGTGAAGAAG CCGTGCCTGG AGCCACCCGG CTCATGCGTC 1320
394 GCATACAGCA GGCACCGCAC ACGGCATCGC GGAGGCTGGC CGAAGAGCGG GGCGCATTCC 1380
396 CGCGTTCAC CGATAGCCGG TTCGCGCGGT CGGGCCCGAG GCGCAACGCA CAGGTCACCT 1440
398 CGTCGCTCC GACGGCA 1458
401 (2) INFORMATION FOR SEQ ID NO: 9:
403 (i) SEQUENCE CHARACTERISTICS:
404 (A) LENGTH: 862 base pairs
405 (B) TYPE: nucleic acid
406 (C) STRANDEDNESS: single
407 (D) TOPOLOGY: linear
409 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
411 ACGGTAACT CGTGTGGAT CTGGAACCCG GTGGCCCGCT ACCTACCGAG ATCTACTGGC 60
413 GCGCAGGGG GCTGGCCCTG GGCATCGCGG TCGTCGTAGT CGGGATCGCG GTGCCATCG 120
415 TCATCGCCTT CGTCGACAGC AGCGCCGGTG CCAAACCGGT CAGCGCCGAC AAGCCGGCT 180
417 CCGCCCAGAG CCATCCGGGC TCGCCGGCAC CCCAAGCACC CCAGCCGCC GGGAAACCG 240
419 AAGGTAACGC CGCCGCGGCC CCGCCGCAAGG GCCAAACCC CGAGACACCC ACGCCAACCG 300
421 CCGCGGTGCA GCCGCCGCCG GTGCTCAAGG AAGGGGACGA TTGCCCCGAT TCGACGCTGG 360
423 CCGTCAAAGG TTTGACCAAC GCGCCGCACT ACTACGTCGG CGACCAGCCG AAGTCACCA 420
425 TGGTGGTCAC CAACATCGGC CTGGTGTCT GTAAACGCGA CGTGGGGCC GCGGTGTTGG 480
427 CCGCCTACGT TTACTCGCTG GACAACAAGC GTTGTGGTC CAACCTGGAC TCGCGCCCT 540
429 CGAATGAGAC GCTGGTCAAG ACGTTTCCC CCGGTGAGCA GGTAAACGACC GCGGTGACCT 600
431 GGACCGGGAT GGGATCGCGC CCGCGCTGCC CATTGCCGCG GCCGGCGATC GGGCCGGGCA 660
433 CCTACAAATCT CGTGGTACAA CTGGGCAATC TGCCTCGCT GCCGGTTCCG TTCATCCTGA 720
435 ATCAGCCGCC GCCGCCGCC GGGCCGGTAC CCGCTCCGGG TCCAGCGCAG GCGCCTCCGC 780

Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.

Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.

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VERIFICATION SUMMARY
PATENT APPLICATION: US/09/724,685

DATE: 10/24/2001
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Input Set : A:\-85-6-1.app
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L:31 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
L:32 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
L:1894 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:54
L:1955 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:58
L:1969 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:59
L:1999 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:61
L:2063 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:63
L:2151 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:65
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L:4908 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:133
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L:4936 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:135
L:4964 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:137
L:5271 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:145
L:5283 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:145